

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 8 and 11-18 have been canceled without prejudice or disclaimer, and claim 1 has been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1, 4-7, 9, 10, and 19-23 are pending and under consideration. Reconsideration is respectfully requested.

ENTRY OF RESPONSE UNDER 37 C.F.R. §1.116:

Applicants request entry of this Rule 116 Response and Request for Reconsideration because:

(a) at least certain of the rejected claims have been canceled thereby at least reducing the issues for appeal;

(b) it is believed that the amendment of claim 1 puts this application into condition for allowance;

(c) the amendment was not earlier presented because the Applicants believed in good faith that the cited prior art did not disclose the present invention as previously claimed;

(d) the amendment of claim 1 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and/or

(e) the amendment places the application at least into a better form for appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." (Underlining added for emphasis) Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

CANCELLATION OF WITHDRAWN CLAIMS:

Since this is a reply to a final rejection, as noted on page 2, paragraph no. 1, withdrawn

claims 11 and 18 have been cancelled without prejudice or disclaimer.

REJECTION UNDER 35 U.S.C. §103:

A. In the Office Action, at pages 3-4, numbered paragraph 5, claims 1, 4-9, 12-16 and 19-23 (24 is cancelled) were rejected under 35 U.S.C. §103(a) as being unpatentable over Yamaguchi et al. (USPN 5,753,322; hereafter, Yamaguchi). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claims 8 and 12-16 have been cancelled without prejudice or disclaimer.

Applicants respectfully submit that the claimed invention uses a volatile solution, and thus no film remains after the thermal treatment. In contrast, Yamaguchi utilizes at least one of an acrylic resin, a polyester resin, a polyurethane resin and a fluorocarbon resin as a coating material (see claim 11, Yamaguchi). Thus, Yamaguchi forms, on the building material, a coating film having a thickness of several micrometers.

In addition, the claimed invention requires only a thermal treatment in order for nano-sized metal particles to adhere to a body. In contrast, Yamaguchi requires an electrostatic/electrodeposition process in order for the coating material having the particles to be coupled with the anodic oxide film electronically and thermally treating to harden the coating material.

It is respectfully submitted that the invention of Yamaguchi requires the use of an anodic oxide film on the surface of a substrate made of aluminum alloy. Then, a coating film incorporating therein or carrying thereon fine particles of a photocatalytically active semiconductor is applied, permitting the antibacterial and antifungal film to be applied as a coating uniformly with high adhesive strength (see col. 5, lines 16-38 of Yamaguchi).

Hence, Yamaguchi discusses a necessity of using the anodic oxide film to provide sufficient adhesion of the layer of fine particles of a photocatalytically active semiconductor to the substrate, thus **teaching away** from the present invention (see independent claims 1 and 24), which coats nano-sized metal particles, wherein the metal particles are selected from the group consisting of silver (Ag), aluminum (Al), copper (Cu), iron (Fe), zinc (Zn), cadmium (Cd), palladium (Pd), rhodium (Rh) and chrome (Cr), directly onto a body. In contrast, Yamaguchi recites the use of a photocatalytic semiconductor in the film layer, such as TiO₂, SrTiO₃, ZnO, CdS, SnO₂, RuO₂, Cs₃Sb, InAs, InSb, and GaAs (see col. 5, lines 58-65 of Yamaguchi).

For clarity, claim 1 of the present invention have been amended to recite, in part: "wherein the metal particles are selected from the group consisting of silver (Ag), aluminum (Al),

copper (Cu), iron (Fe), zinc (Zn), cadmium (Cd), palladium (Pd), rhodium (Rh) and chrome (Cr).” Yamaguchi does not discuss coating the surface of a body with silver (Ag), aluminum (Al), copper (Cu), iron (Fe), zinc (Zn), cadmium (Cd), palladium (Pd), rhodium (Rh) or chrome (Cr).

Thus, amended claim 1 is submitted to be patentable under 35 U.S.C. §103(a) over Yamaguchi et al. (USPN 5,753,322). Since claims 4-7, 9 and 19-23 depend from amended claim 1, claims 4-7, 9 and 19-23 are submitted to be patentable under 35 U.S.C. §103(a) over Yamaguchi et al. (USPN 5,753,322) for at least the reasons that amended claim 1 is submitted to be patentable under 35 U.S.C. §103(a) over Yamaguchi et al. (USPN 5,753,322).

B. In the Office Action, at pages 3-4, numbered paragraph 5, claims 1, 4-8, 10, 12-15, 17, and 19-22 (24 is cancelled) were rejected under 35 U.S.C. §103(a) as being unpatentable over Nishida et al. (USPN 5,897,673; hereafter, Nishida). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claims 8, 12-15 and 17 have been cancelled without prejudice or disclaimer.

Claim 1 has been amended to recite, in part: “A method of providing antibacterial activity to a non-fibrous surface of a body using nano-sized metal particles, comprising: coating a volatile solution dispersed with nano-sized metal particles onto the non-fibrous surface of the body.” Thus, amended claim 1 is submitted to be limited as to the type of body used as the substrate, to exclude the use of fibers as substrates, to be different from Nishida, and to be patentable under 35 U.S.C. §103(a) over Nishida et al. (USPN 5,897,673). Since claims 4-7, 10, and 19-22 depend from amended claim 1, claims 4-7, 10, and 19-22 are submitted to be patentable under 35 U.S.C. §103(a) over Nishida et al. (USPN 5,897,673) for at least the reasons that amended claim 1 is submitted to be patentable under 35 U.S.C. §103(a) over Nishida et al. (USPN 5,897,673).

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

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Docket No. 1594.1258

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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